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ABSTRACT

Intelligence tests should be used to help persons; they should not be used to penalize persons. Furthermore, our focus should be on treatment; it should not be on labeling. IQ testers often stigmatize young children and poor persons (children, adolescents, adults). Large groups of Black Americans, Spanish Americans, and Indian Americans are probably mis-classified as to ability because of a differential society and culture. This paper attempts to develop a better understanding of tests and testing. If intelligence testing is to continue, it should be done intelligently. But the time, effort, and money could be better spent in treatment procedures: developmental, corrective, remedial, educational, vocational, personal, social. (Author)

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INTELLIGENT INTELLIGENCE TESTING

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Abstract

Intelligence tests should be used to help persons; should not be used to penalize persons. And furthermore, our focus should be on treatment; should not be on labeling. IQ testers often stigmatize young children, and often stigmatize poor persons (children, adolescents, adults). Large groups of Black Americans, Spanish Americans, and Indian Americans are probably mis-classified as to ability because of a differential society and culture. This paper attempts to develop a better understanding of tests and testing. If intelligence testing is to continue, it should be done intelligently. But the time, effort, and money could be better spent in treatment procedures: developmental, corrective, remedial; educational, vocational, personal, social.

TM 002 475

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More work has been done in practice than in theory with intelligence testing. Learning or achievement plays a major role in intelligence testing. Basic or native differences exist but how can one rule out or control the so-called nurture question in most instances? And would so-called nature (physiological, neurological, biochemical, synaptic, genetic, or what have you) give a definitive point or level or would it give us a gross range? In our opinion, it would only be a gross range. Variability would be included within and between nature and nurture. There are differences at birth and throughout life. Persons should be equal before the law (voting, court procedures, etc.), should have adequate educational opportunities, and should have adequate vocational opportunities--but differences are flagrant. Let us not deny the differences, but let us understand them, and then let us do something positive about them. And distinquish between ideal and real (Plato), between noumena and phenomena (Kant).

So long as test-measurement is fallible, peccable, intelligent behavior as measured by IQ or any other standard score is fallicle, peccable. Only when we realize the personal-social context (of a sampling or samplings) of intelligent behavior can we arrive at reality. In short, intelligence testing should help people achieve greater heights and not penalize them. Calling someone retarded who isn't, or misplacing someone in a class, grade, or institution can be catastrophic for that individual.

Consider the validities, reliabilities, standardizations, normatizations, and weaknesses of tests. Consider the kinds of intelligence testing, (verbal, non-verbal, etc.), the levels (chronological age)of intelligence testing, estimated or measured intelligence, group or individual tests,etc.

Consider the personal-social context. Consider the test, the examiner, the client, the situation, and their interactions. Consider the precipitating and predisposing factors. Then and only then, may one make an educated judgement. In our compulsive, doer society, tests have helped some individuals and some groups, cut they have also harmed too many individuals and too many groups (more on this later). The signs are there, its up to us to interpret them. Hofstaetter (J. Genet. Psychol., 1954, 85, 159-167) said that as far as the chronological age (CA) level of the testing:

a) Tests up to age 2 or so seem to have a factor of "sensory-motor alertness."

b) Tests from about 2 to 4 deal with a factor of "persistence" or "goal orientation."

c) Tests after about year 4 deal with a "provisional action", symbol processes, varying hypotheses, manipulation of symbols, or problem-solving ability.

Tests such as administered in the Berkeley Growth Study (Bayley, Nancy "On the growth of intelligence." Amer. Psychologist, 1955, 10, 805-818, and "Consistency and variacility in the growth of intelligence from birth to eighteen years." J. Genet. Psychol., 1949, 75, 165-196; Pinneau, S. R. Changes in Intelligence Quotient, Infancy to Maturity. Boston: Houghton Mifflin, 1961) e.g., California First Year Mental Scale, California Pre-School Scale 1, Stanford Binet (form L & M) indicate that children at:

a) 6 months had an almost .00, slightly negative , correlation with the same children at 18 years.

b) 1 year had about a .25 correlation (thus accounting for 6% of the variance) with the same children at 18 years.

c) 2 and 3 years had about a .50 correlation (thus accounting for 25% of variance) with the same children at 18 years.

d) 4 years had a correlation in high .60's with the same children at 18 years.

e) 5, 6, and 7 years had a correlation in the mid .70's with the same children at 18 years.

And these were the better results. The prediction then in the context of specific tests given to groups of individuals over a period of time increases markedly from early infancy to school age when their previous scores are compared with the children's scores at about year 18. The predictability is far from ideal, but it may still be useful as long as one is positively concerned with goals of the tests, of the children, etc. The correlation and scores between young-school-age and young-adulthood may be rather consistent for the group, but rather inconsistent for the individual. Changes between 6 and 18 years of age on data supplied by the Berkeley Growth Study were 20 points or more for almost 60% of those taking the tests. Some children varied 50 points--it seems impossible, doesn't it? But <u>this</u> is reality.

There are no real culture-free or culture-fair intelligence tests. They can be approached but it's like taking one step where one thousand steps are needed--we fall far short. Clients from poorer socio-economic environments do poorer than children from better (e.g., middle-class) environments. This difference though real in test scores may not be real in terms of nature, basic intelligence. At this time we can not measure

native, basic, synapse, reflex intelligence, per se. All one can do is approach the problems with experimental controls and statistical astuteness. And then we are still not usually speaking of the individual, but of the group. Clinical judgment predicated upon some scientific knowledge is essential. Abstract words, abstract reasoning, greater breadth of experience, test taking experience--all affect scores adversely for poor children. Minimal experience and exposure is needed before a client should even be given a test. And most intilligence tests are premised on middle-class referents and middle class values.

Our focus ought to be on treating rather than testing, classifying, or diagnosing. What is important is trying to solve the problems, not labeling it. Most of the effort and time that consultants (psychometrists, psychologists, reading specialists, etc.) spend in schools should be with treatment procedures (developmental, corrective, remedial). And one should not be unrealistic and/or theoretical--one should be practical. One should not accept a student's lack of behavior or misbehavior but accept the child for what he can become (and we can help him). One should not say "right or wrong my child," but, "how can I help this child get the most out of his educational and vocational environments."

Following are some statements which cast light upon some problems in appraising intelligence:

1) Adopted children are on the whole brighter than our own biological children. Why? Consider selectivity.
2) IQ's of identical twins generally correlate in the .80's and .90's if they are reared together.
3) IQ's of fraternal twins generally correlate in the .70's if they are reared together.

4) IQ's of non-twin siblings reared more or less together generally correlate around .50.

5) IQ's of twins reared separately generally have a lower correlation (than those listed above). Why? Consider models.

6) There are correlational and mean-difference statistics. Both should be considered in the same research.

7) Children brought up in conventional institutions have less effective intellectuality and emotionality. Remove them and they can improve, at least in part.

8) Children brought up in deprived (poor) areas have less effective achievement motivation. Improve their setting and you may help them. Modeling (as part of operant conditioning) is very important here.

9) Nursery-school attendance can help IQ scores for some children. especially deprived, neglected, etc. But the increases may not last. Enrichment in a life-experience approach needs to go on.

10) Culture-free or culture-fair tests are a hope rather than a fact. Some are more culture-fair than others, but none is adequate. The nature-nurture problem is very complex and has not been solved.

11) Socio-economic level is definitely related to IQ scores. The poor are penalized. The poor (the so-called lower-lower class, the so-called disadvantaged) are penalized 10 to 20 points.

12) Poor Whites are penalized on IQ tests, generally 10 to 15 points. Remember that two-thirds of the poor are White.

13) Poor Blacks are penalized on IQ tests, generally 10 to 20 points. About 1/3 of the Blacks are poor, and they tend to be the abysmally poor. That means that about 1/3 of the Blacks could be erroneously classified as educable retarded in most states.

14) Indians and Spanish Americans are poor and penalized 10 to 20 points on IQ tests. Many of them could be erroneously classified as educable retarded in most states.

15) Retarded children whose IQ's range from 50-70 who do not show neurological deficit probably have some cultural retardation.

16) Language is the most important element in IQ testing in our culture at this time for school prediction purposes. Language in a life-experience approach needs to be emphasized.

17) One must consider the test, the child, the examiner, the situation, the personal-social context and their interactions to avoid being derelict in one's work. And treatment should be emphasized.

18) The "Rosenthal effect" shows that a teacher's attitude can critically effect a student's performance. We should emphasize positive reinforcement. The 4 R's are reading, 'riting, 'rithmetic, and reinforcement.